Date: Wed, 13 Jan 93 04:30:19 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #54
To: Info-Hams

Info-Hams Digest Wed, 13 Jan 93 Volume 93 : Issue 54

Today's Topics:

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 13 Jan 93 04:01:21 GMT
From: news-mail-gateway@ucsd.edu
Subject: [ANS] Boatanchors of old
To: info-hams@ucsd.edu

Ya'll know that there is a "mailing list" just for "boatanchors"?
Send your "subscription" to BOATANCHORS@ACIDQUEEN.ENG.SUN.COM

Cheerios...jd-k1zat

Date: 13 Jan 93 02:46:33 GMT
From: nntp.telebit.com!phr@uunet.uu.net

Subject: Anybody want to talk about Clover?
To: info-hams@ucsd.edu

Are the details of the Clover protocols published, i.e. is enough
info available for J. Random Ham (with enough engineering resources)
to build his/her own Clover board without having to disassemble
or reverse engineer anything?

Date: 13 Jan 93 00:29:30 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!spool.mu.edu!olivea!sgigate!odin!
chuck.dallas.sgi.com!adams@network.UCSD.EDU
Subject: Boatanchors of old
To: info-hams@ucsd.edu

In article <1993Jan12.155534.2402@ccsvax.sfasu.edu>, f_speerjr@ccsvax.sfasu.edu
writes:
|> >
|> > Here are the advertising bullets for the -100:
|> >   o Phone or CW on 160,80,40,20,15,11,and 10 meters.
|> >   o Built-in VFO, modulator, and power supplies.
|> >   o Kit includes all parts-tubes-hardware-cabinet, etc.
|> >   o Coils are pre-wound and cables pre-harnessed.
|> >   o High-quality components used throughout for reliable performance.
|> >   o Features 5-point TVI suppression.
|> >   o Easy to build from complete instructions and pictorial diagrams
|> >   enclosed.
|> >
|> > Don't you just wish they still offered a kit like this?
|> > Naaaah! No bells and whistles! And ya gotta know how to tune the finals!
|> The DX-20 was my first rig. Worked 30-some-odd states on the novice bands from
|> a bottom-loaded vertical.
|>
|> So now, gray beard and all, I'm setting up a new station: National NC-300
|> receiver and Heath Apache transmitter (180 watts from a pair of 6146's, and
|> BEAUTIFULLY modulated AM).
|>
|> Cheers!
|> Jim Speer, K5YUT

Wow, in 1960-1961 school year i ran Apache and NC-300 in my own room with
both on a card table. went through 9 ARRL logbooks (remember when we had
to keep logs, and i still do) in 9 months on 40 cw. wanna know how i
got above 70 wpm? i thought you didn't.

refresh my memory. 1 nc-300 + 1 apache = 150 pounds or more.

i used two 1n34's back to back across the receiver input with 5 watt 150 volt bulb in line to antenna with apache to antenna, 40 mtr inverted vee. worked qsk without a relay. boy, those were the days..... ;-)

73 de k5fo chuck CP-60

Date: 13 Jan 93 06:09:46 GMT
From: news-mail-gateway@ucsd.edu
Subject: Daily Solar Geophysical Data Broadcast for 12 January
To: info-hams@ucsd.edu

```
!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 012, 01/12/93
10.7 FLUX=140.2  90-AVG=141        SSN=165      BKI=3222 2210  BAI=006
BGND-XRAY=B5.0     FLU1=6.0E+05  FLU10=9.6E+03  PKI=3332 3231  PAI=010
  BOU-DEV=027,018,015,012,014,014,006,004   DEV-AVG=013 NT     SWF=00:000
 XRAY-MAX= C6.1   @ 1437UT    XRAY-MIN= B4.2   @ 0704UT   XRAY-AVG= B7.4
NEUTN-MAX= +002%  @ 2255UT   NEUTN-MIN= -002%  @ 1540UT  NEUTN-AVG= -0.0%
  PCA-MAX= +0.1DB @ 2320UT     PCA-MIN= -0.4DB @ 1725UT    PCA-AVG= -0.0DB
BOUTF-MAX=55427NT @ 1450UT   BOUTF-MIN=55397NT @ 2000UT  BOUTF-AVG=55415NT
GOES7-MAX=P:+097NT@ 1758UT   GOES7-MIN=N:+004NT@ 0937UT  G7-AVG=+071,+032,+008
GOES6-MAX=P:+118NT@ 1752UT   GOES6-MIN=E:-007NT@ 0139UT  G6-AVG=+089,+001,+041
 FLUXFCST=STD:135,135,130;SESC:135,135,130 BAI/PAI-FCST=010,015,010/010,015,010
    KFCST=3333 5333 3333 3333  27DAY-AP=009,005   27DAY-KP=3213 2223 1322 1211
 WARNINGS=
   ALERTS=
!!END-DATA!!
```

Date: 12 Jan 93 23:26:11 GMT
From: usc!news.bbn.com!olivea!spool.mu.edu!howland.reston.ans.net!zaphod.mps.ohio-state.edu!magnus.acs.ohio-state.edu!csn!qwerty-gw.fsl.noaa.gov!quent@network.UCSD.EDU
Subject: How to get started?
To: info-hams@ucsd.edu

In <#-41H1euzb@atlantis.psu.edu> CLF@ECLX.PSU.EDU (Christopher L Frame) writes:

>   I'm interested in how to get started with a ham-radio. I don't own
>one, but have recently discovered a reason for getting one.

I also just became interested in amateur radio. I've been reading everything I get my hands on. A friend recommended I get "Now You're Talking", published by the American Radio Relay League. It covers novice and technician material -- I'm going to start with the "no-code"

technician license. The book seems pretty good so far. It cost $19.00

There are several HAM oriented magazines worth checking out. I don't know all the names but look for "73" and the others will be nearby. They seem helpful for learning jargon and finding suppliers. If you're lucky there'll be a HAM store near you where, in addition to books, you'll see all the cool toys. If not you order the book from ARRL at:
     (203)666-1541 / 225 Main St. Newington, Connecticut 06111

ARRL also has lists of ham clubs so you can find fellow addicts.

>   I also heard that a ham license is required. How much is it?

It's only required to transmit. Listening is free.

There are several classes of licenses. The two entry levels are novice and technician. The novice license requires passing a 5 word per minute morse code test and a 30 question written test. The "no-code" technician license requires passing two written tests (55 total quesions). Passing an additional 5 word per minute morse test gives you the technician plus license.

The novice class test covers FCC regulations and elementary theory; the technician class test covers a bit more theory and regulations -- it's more aimed at VHF/UHF. Other than morse code the basic difference between novice and technician class is that novices can work in the HF bands which cover longer distances while the technicians can work in the shorter wavelengths which have a smaller range (there are some exceptions though). The technician plus is basically novice and technician combined. I'm going to start with the technician class and work up from there. This is a recent change in the rules designed to get more people started in amateur radio since morse code was perceived as a large barrier.

I think the cost is minimal, like a few dollars. The major investment is time and equipment cost.

I've been listening in to some local 2 meter band repeaters. Some folks were discussing a group of youngsters who just passed their tests. One 8 year old earned his technician plus license! Another person was having his 80th birthday. This hobby is for everyone!

--
     Quent Johnson (quent@md.fsl.noaa.gov)
     NOAA Forecast Systems Laboratory, Modernization Division
     /\~/\^/\^/\~ Boulder, Colorado USA

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Date: 12 Jan 93 22:17:24 CST
From: usc!howland.reston.ans.net!paladin.american.edu!darwin.sura.net!tulane!
agwbbs!Angelo_Glorioso_Iii@network.UCSD.EDU
Subject: Manual
To: info-hams@ucsd.edu

Hi All,


 I have several Pace Radios I would like to mod for Ham Radio use..  I am
looking for a Maneual or Service Manueal on the Pace Landmaster II.. I will
be glad to pay for all cost to copy..

73 Angelo


-- Via DLG Pro v0.995

Internet:angelo_glorioso_III@agwbbs.new-orleans.LA.US
  Usenet:rex!agwbbs!angelo_glorioso_III
  Packet:N5UXT @ N5UXT.#NOLA.LA.USA.NA
  Tcp/ip:N5UXT.AMPT.ORG  [44.108.2.13]

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Date: 12 Jan 1993 22:34:15 -0600
From: usc!cs.utexas.edu!not-for-mail@network.UCSD.EDU
Subject: New Licensees: When did you test?
To: info-hams@ucsd.edu

Howdy...

        I tested for an upgrade on Sept. 26th and got my license Dec.
26th.....that's right at 3 months.....
        Good luck.....

        73...

        T. Keller
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Internet:  phantom@pro-haven.cts.com           KJ5GU/AE
UUCP:      crash!pro-haven!phantom             Try 28.440MHz.....
        For the latest breaking Aggie Jokes, Dial 1-800-AGGIE-IQ.....
".....and for the first time in twenty years in Waxahachie, Texas.....
......it rained!"   The Rocky and Bullwinkle Show
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

Date: Tue, 12 Jan 1993 22:00:48 GMT
From: usc!cs.utexas.edu!asuvax!chnews!hfglobe!zardoz@network.UCSD.EDU
Subject: Ringo Ranger II performance
To: info-hams@ucsd.edu

In article <ll42laINNh4@exodus.Eng.Sun.COM> wdh@oversteer.Eng.Sun.COM writes:
>The Ringo Ranger II performed much better than a Jpole for me. I replace
>a Jpole with a RR-II using the same mast and coax. Repeaters that were not
>workable with the Jpole became reliably workable with the RR-II.
>
>I am glad I made the switch.
>
>...Dennis Henderson, N6TTW, 146.535
>
>ps: I can't comment on ruggedness in harsh winters. I live in California.
>No problems in 1.5 yrs.
>

My Ringo Ranger with a home-made II section has held up well from being
whipped on top of a 60' Cedar tree for 4 winters of strong gusty winds.
I bought it used for $20, disassembled it and ScotchBright'ed the sleeves,
applied NoAlOx or Penetrox on the joints, and reassembled it with stainless
steel hardware. I've done this to 3 of them and after careful tuning they
work great. I don't thing the extra decoupling section of the Ranger II
is effective or worthwhile. The Ringo's gain is considerable over a 1/4 wave
drooping radial vertical which tells me that the alledged feedline radiation
of Ringos is not bad enough to worry about.
IMHO Ringo antennas have an excellent Price/Performance ratio which I can't
say about Diamond or Comet. They've also been around a lot longer and used
bargains are widely available.
If you want performance use a 4 bay collinear array of dipoles giving an
honest 9 dbd gain in the cardiod pattern. Otherwise build a twinlead J-pole
or buy and fix a used Ringo. Where are the used isopoles? I had a 440
isopole and its mechanical construction sucks.

WA7LDV

Date: Wed, 13 Jan 1993 02:41:02 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!usenet.ins.cwru.edu!neoucom.edu!
wtm@network.UCSD.EDU
Subject: Yaesu FT 5100 Reviews??
To: info-hams@ucsd.edu

Crossband repeat: hold the RPT button down with the transciever

off; keep holding while truning on the power. This toggles the
crossband function every time you do this step.

Display dimmer: Automatic: yuck. Hold the MHz while powering up.
Press the function button once. The freq knob now adjusts the
brightness. Press the function button again to lock in the
setting. Pressing the function button once again any time later,
then twisting the freq know allows adjustment as above. Repeat
power up sequence to toggle back to auto. It's in the manual, but
the explanation is murky.

Not sure about the pager mode; I used it once to make sure it
worked then went on about my business.

Expanding the receive disables the ARS feature; confirmed by Yaesu
technical support.

73,
Bill

--
Bill Mayhew   NEOUCOM Computer Services Department
Rootstown, OH 44272-9995 USA   phone: 216-325-2511
wtm@uhura.neoucom.edu (140.220.1.1)   146.580: N8WED

Date: 13 Jan 1993 09:22:50 -0000
From: usc!howland.reston.ans.net!spool.mu.edu!agate!doc.ic.ac.uk!warwick!warwick!
not-for-mail@network.UCSD.EDU
To: info-hams@ucsd.edu

References <1993Jan9.141959.17257@ke4zv.uucp>,
<1is80mINNb0r@clover.csv.warwick.ac.uk>, <1993Jan12.095904.7329@walter.cray.com>
Subject : Re: intermod, overload, desense?

In article <1993Jan12.095904.7329@walter.cray.com> jwl@ferrari.cray.com (Jim
..Couple of posts regarding details of quarter wave stub deleted..

>Would either of you two gentleman care to discuss the characteristics of this
>filter? Like what are the bandpass (bandreject?) characteristics? How would you
calculate
>them?   The books discuss l/c filters and active filters, but is there a simple
>way to determine the characteristics of a stub?
>
>Thanks, Jim.

Jim, probably the easiest way to think about achieving filtering by use of a stub is to consider the input impedance of the stub, and realise that that impedance is placed directly across the terminals of the receiver.

Standard transmission line theory gives the equations required, however if you're familiar with the use of the Smith Chart it's even easier.

Basically, as you move along a transmission line away from the end of an open circuit the impedance seen will change, from capacitive for the first quarter wavelength, then inductive for the next, then capacitive etc. At odd multiples of wavelength/4 the impedance is virtually zero (i.e. a short), whilst at even multiples it is virtually infinite.

By using such a stub, you're hoping for the following: input impedance of stub at interfering signal freq = 0 (therefore interferer greatly attenuated), whilst input impedance in the band you actually want to receive = very large, as to have no effect on the circuit (therefore negligible attenuation of wanted signals).

The relevant equations for stubs are:

for electrical cable length < quarter wave

Xin = - Zo / tan (theta) (i.e. capacitive)

for el. cable length > quarter wave but < half wave

Xin = Zo tan (theta - 90)

where theta is the cable electrical length in degrees, Zo the characteristic impedance of the stub cable, and Xin the input impedance of the stub.

The above equations are periodic in theta, i.e. repeat every 180 degrees.

So, all you're actually doing is placing a frequency dependent reactance in the circuit. Of course, if the interferer is very close to the wanted signal frequency then the stub will have almost equal effects for both, but if fairly well removed it could work very well (depending on Xin at both frequencies).

Hope that helps,

73

Simon G0GWA

Date: 13 Jan 1993 09:29:30 -0000
From: pipex!doc.ic.ac.uk!mrccrc!warwick!warwick!not-for-mail@uunet.uu.net
To: info-hams@ucsd.edu

References <1993Jan12.103227.7760@walter.cray.com>,
<1993Jan13.002531.18032@sbcs.sunysb.edu>, <PHR.93Jan12184633@napa.telebit.com>
Subject : Re: Anybody want to talk about Clover?

As there has been just about nothing written about Clover over here, I wonder if anybody 'over there' has seen any details of the modulation employed in Clover? Presumably some form of FSK/ MSK is used, and what sort of spectral efficiency is achieved?

Any info appreciated,

Simon G0GWA

End of Info-Hams Digest V93 #54
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